INCLUDES PRODUCTS AS FEATURED IN

2014

NASA MARINE INSTRUMENTS

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NEW

Yacht Repeater

A new large display, mast mounted, multifunction repeater

The weatherproof repeater with its giant 60mm high numerals, is supplied complete with cables, data-box with six NMEA-0183 inputs (With up to three sentences per input.), wireless remote control, stainless steel mounting brackets and weather cover. There are nine levels of red back lighting which permit easy night viewing of red characters on a black background.

The overall case size is
211mm wide x 140mm high.

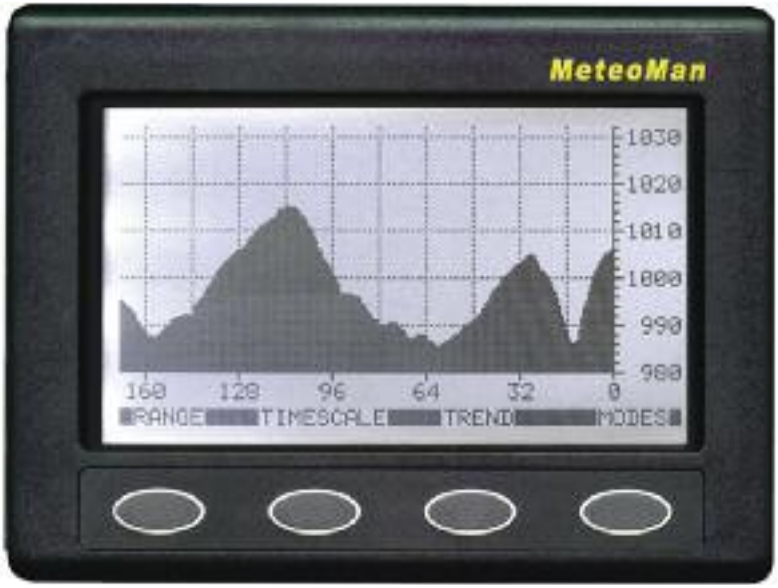
DISPLAY SCREENS SHOWN:

SPEED OVER GROUND
COURSE OVER GROUND
BOAT SPEED
BEARING TO WAYPOINT
COMPASS HEADING
VELOCITY MADE GOOD
TRUE WIND SPEED
TRUE WIND ANGLE
APPARENT WIND SPEED
APPARENT WIND ANGLE
CROSS TRACK ERROR
DEPTH in METRES

Other screens will be added
by popular demand

For a yachtsman planning a voyage, the ability to predict the weather is essential. The rate of change of barometric pressure and history of wind speed can be an invaluable indicator of imminent conditions.

Meteoman



Many sailors rely on low cost domestic barometers, which are inaccurate, have low resolution and very poor history. Several quality paper recording instruments exist but are delicate, fiddly to use and rely on paper which can jam when damp. The MeteoMan overcomes all these problems. It provides an accurate, high resolution barograph recording in excess of five days data on barometric pressure and wind speed. It is easy to use, reliable, rugged and draws very little power from the boat's battery.

To assist in predicting future trends the unit also displays a precision barograph and an anemograph showing barometric pressure and wind speed for the previous seven days.

In addition to the meteorological functions the unit includes a marine chronometer, a stop watch, a race countdown timer, display of internal temperature and battery voltage.

Rate of change of pressure of last 24 hours

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The Meteoman is available with an optional NMEA Wind sensor which provides wind direction, wind speed and external temperature. The Meteoman provides reliable meteorological information for the yachtsman. The main display shows the wind speed and direction, the ambient temperature and the barometric pressure.

MeteoMan can be connected to an NMEA Clipper Wind system where it will get wind speed/direction data via the Clipper wind output.

NMEA Wind Sensor supplied with mounting brackets and 20 metres of two core screened cable.

NMEA 0183 sentences: Wind speed/direction MWV Temperature XDR

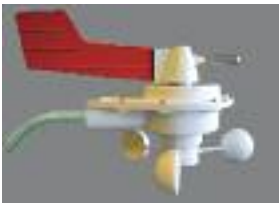
Optional cradle mount bracket

Technical Data

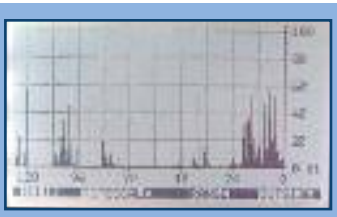
- **Atmospheric Pressure Range**
  850 to 1100mb (user adjustment to compensate for altitude)
- **Pressure Trend**
  Rate of change of pressure for previous 24 hours in millibars per hour
- **Pressure History**
  Range 1 - 950 to 1050mb
  Range 2 - 980 to 1030mb with 0.5mb resolution
- **Recording time**
  0 to 120 hours
  0 to 60 hours
  0 to 30 hours
- **Wind speed**
  (when fitted with NMEA wind sensor)
  Maximum speed 100knots

  Wind speed history
  Range 1 - 0 to 100knots
  Range 2 - 0 to 50 knots
  Range 3 - 0 to 25 knots
- **Recording time**
  0 to 120 hours
  0 to 60 hours
  0 to 30 hours
- **Wind direction** (when fitted with NMEA wind sensor)
  0 to 360 degrees (in relative mode)
  Port 180 degrees to Starboard 180 degrees (in nautical mode)

  Displayed in analogue and digital format
  Resolution 1 degree
- **Real time clock**
  12 or 24 hour format
  Race countdown timer 10 and 5 minutes
  Stop watch with split timing
- **Temperature**
  Outside temperature
  (when fitted with NMEA wind sensor)
  Cabin temperature
  Resolution 1 degree centigrade
- **Supply voltage**
  9.0 to 15.0 volts
  The voltage is shown on the display with a resolution of 0.1 volts
- **Supply current**
  Operating current 100mA
  (when fitted with NMEA wind sensor)
  Operating current 150mA
  (with backlight illuminated)
  Standby current - less than 10mA
- **Dimensions**
  Width 150mm, Height 112mm,
  Depth 42mm



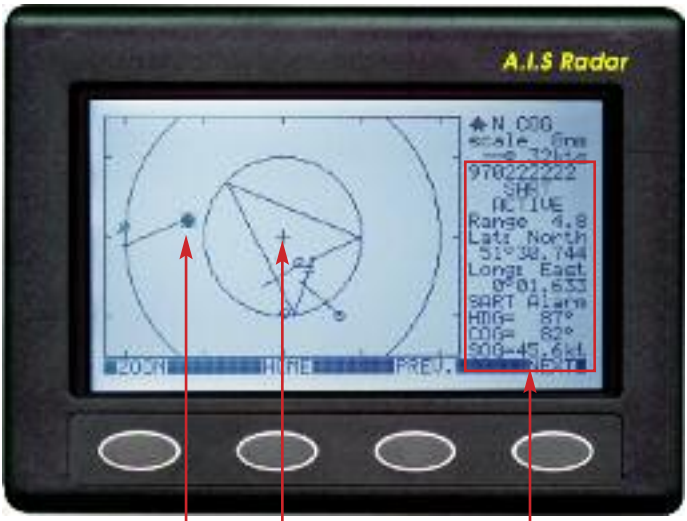
NMEA Wind Sensor



History of wind peaks

The AIS SART Radar is the first stand alone AIS receiver / plotter specifically designed for the leisure boat market.

AIS SART Radar



The Automatic Identification System (AIS) is a shipboard broadcast VHF transponder system, sending data about the identity of a ship. Its name, MMSI number, its latitude, longitude, speed, course and heading. All vessels over 300 gross tonnage and all passenger vessels are obliged to carry an AIS transponder. This transponder assists in traffic monitoring, management and collision prevention. The data is sent continuously and is useful to yachtsmen, particularly in busy shipping areas.

The unit consists of a dual frequency AIS receiver, demodulator, signal processor and a backlit matrix display. It receives an NMEA

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Optional cradle mount bracket

input (RMC) from the boats GPS which puts the user at the centre of a radar style screen. A COG pointer is selectable by the user. All other AIS carrying vessels and SART transponders are displayed with bearing and range relative to the user. Any target on the screen can be selected by the user. The selected target is highlighted and its data displayed on the right of the screen. This data includes the vessel's MMSI number, name, course over ground, speed over ground, range, latitude and longitude.

The display, with ranges of 0.125, 0.25, 0.5,1,2,4,8,16 and 32 nautical miles shows AIS carrying vessels and SART transponders in a format normally associated with conventional radar. A trail of previous positions clearly chows the relative track of all the targets on the screen. A box to the right of the screen displays the speed over the ground, the vessel name, MMSI number and the latitude and longitude of any target selected by the user.

As each vessel leaves a trail of previous positions the user can instantly see its relative position and bearing. Should any vessel cause concern (particularly if there is a risk of collision) it can be selected and its AIS data displayed. The MMSI number is immediately available so, in the last resort, a DSC call can be made directly to that vessel. If the user selects his own vessel then the screen repeats the users GPS position, course and speed over ground.

Each vessel's status is shown by a different symbol so the user can see if a vessel is underway, at anchor, fishing etc.

The compact unit has a white backlit LCD display, operates from 12 volts and consumes little power.

Technical Data

- Ranges 0.125, 0.25, 0.5, 1, 2, 4, 8, 16 and 32 Nautical Miles
- Receives class A , B and SART AIS transmissions
- Tracks up to 30 vessels
- Uses standard Marine VHF antenna
- 161.975 and 162.025 MHZ operation
- Uses standard NMEA0183 GPS input
- High contrast display with white backlight
- Supply voltage 12 - 15v DC
- Consumption 50mA @ 12v (100mA with backlight)
- Optional stirrup mount bracket available
- Dimensions - width 150mm, Height 112mm, Depth 42mm

The AIS Engine is supplied with a copy of 'SeaClear' chart software and a trial version of 'Software on Board', a data cable to connect to the 9 pin serial port of a PC and a 12 volt power cable.

AIS Engine 3

The AIS Engine and a conventional marine antenna are all you need to start plotting vessels on your PC or AIS compatible plotter. The SeaClear software runs in Windows 98 to 7, it includes a world map on which vessels are plotted. Any vessel on the screen can be selected and its AIS data displayed. This includes the vessels name, MMSI number, position, call sign and destination etc. Also included on the AIS Engine is an optional input for a GPS (RMC sentence). With this connected the users own vessel is shown on the chart with its latitude and longitude displayed in a window.

The unit receives both class A and class B AIS data.

The AIS engine can also be used with plotters or other PC software that have an AIS input facility. Check compatibility with your software supplier. An NMEA 0183HS input at 38,400 baud is required to accept the VDM AIS strings corresponding to ITU-1371.

If your PC does not have a spare 9 pin serial port a low cost serial to USB converter is available as an optional extra.

AIS Engine 3 Technical Data

- Receives both class A and B transmissions
- Operating frequencies - 162.025 and 161.975 mHz
- Supply voltage - 10 to 16 volts DC
- Supply current - 43mA
- All available AIS messages relayed
- Antenna input - 50 ohm BNC
- Data connector - 9 pin 'D' type
- Mounting - via two moulded flanges
- Dimensions - 115 x 100 x 30mm
- Output format - NMEA 0183 (38400 Baud)
- VDM encapsulation string conforming to ITU-1371
- NMEA RMC from GPS

Various receiver parameters are factory preset but can be altered from the PC if software is available.

PC AIS Radar Software

Use with the AIS Engine to show AIS vessels on a radar like screen on your PC. The PC AIS software in conjunction with the AIS Engine provides all the benefits of the popular AIS Radar.

Up to 30 vessels are continuously plotted on the screen in either absolute or relative mode. Any Target can be selected and the relevant AIS data displayed.

- North and Head up
- Vessels are coloured to show their status
- User position can be set manually from GPS
- Ranges 1/2, 1, 2, 4, 8, 16 and 32 Nautical miles
- Variable screen update
- Range alarm
- Windows 98 to 7 compatible

The PC Navtex Pro is a two channel navtex receiver designed to operate on your personal computer. It will receive navtex messages even without your PC connected.

PC Navtex Pro USB

Navtex messages are stored in a vast internal memory for you to download when you get on board. Down loading is quick and the software provided allows you to select the messages you want.

Leave the unit on 24/7 then, when you get on board, just plug in your PC and immediately download the latest weather forecast from your local station, or any other message stored in the PC Navtex Pro's memory.

Technical Specifications

- 518 and 490kHz message reception
- LED's for power and data
- 12 volt supply with very low consumption - 27mA
- Supports selected message printing
- Supply voltage 10 to 16 volts DC
- Dimensions 102 x 100 x 27mm
- Antenna length 195mm (complete with 7 metre cable)

Recommended minimum system requirements:

Microsoft Windows 98 to 7

Processor 500 MHz or better

RAM 128Mb upwards

Screen resolution 1024 x 768

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NASA MARINE INSTRUMENTS

The BM-1 and BM-2 are designed to monitor performance of 12 volt lead acid battery systems with capacities of up to 600 Amp hours. They are supplied complete with precision shunts and prefabricated cable assemblies to enable simple DIY installation. Both units continuously monitor voltage, current (charge or discharge), number of amp/hours (charge or discharge), the battery's state of charge and the time to charge or discharge. This information leads to more efficient use of the battery, which can enhance battery life and reduce the risk of failure.

BM-1 Battery Monitor

ACTUAL SIZE

100 AMP SHUNT

Specifications

Supply voltage	8 - 16 Volts DC
Supply current	1.5 milliamps
Battery capacities	5 - 600 AMP Hour
Load current	100 AMPS Maximum
Charge current	100 AMPS Maximum
Shunt	Standard 50 millivolt @ 100 AMP

24V version available

BM-1 and BM-2
Cables supplied

Shunt link to M8 Ring terminal.

5 Metre from display unit to battery - fused and fitted with ring terminals for shunt, fuse holder and M8 ring terminal to battery.

Display unit

Standard 110mm square Clipper case

High contrast LCD, backlit for night viewing

Minimum voltage visual alarm

Simple operation - 4 keys to select backlight, Volt/Amp/State of Charge screen, AMP hours or Time to run

BM-2 Battery Monitor

ACTUAL SIZE

200 AMP SHUNT

Specifications

Supply voltage	8 - 16 Volts DC
Supply current	1.5 milliamps
Battery capacities	0 - 999 AMP Hour
Load current	199 AMPS Maximum
Charge current	199 AMPS Maximum
Shunt	Standard 50 millivolt @ 200 AMP

The Clipper Wind System shares the same 110mm square case as its sister instruments in the Clipper range. The display is exceptionally large and clear, with 60 segments for full 360° direction indication.

Clipper Wind System

ACTUAL SIZE

Clipper wind showing wind speed of 8.9 knots and wind direction approximately 45° from the port bow.

Clipper Close Haul Repeater

This connects directly to the master wind unit. As well as repeating the wind speed it shows wind direction in high resolution when sailing close to - or running with the wind. Complete with 10 metre cable.

Clipper Wind System

Windspeed is shown in knots, M.P.H. or Metres/second. The pointer style is selectable, from the single segment shown opposite, to multi segments for greater clarity or a 'windex' style indicator. The Masthead unit is supplied with 20 metres of cable as standard. A connector at the masthead enables easy removal if the vessel is de-commissioned.

Technical Specifications

- Supply voltage Nominal 12v DC
- Consumption, 50mA+ (25mA for display illumination max)
- Keypad adjustment of masthead alignment
- 7 levels of display backlighting
- Display case size 110 x 110mm
- Depth behind panel 30mm
- Anemometer head 210 x 140mm
- 5 and 20 metre Extension cables available
- NMEA output 0183 MWV

Clipper Wind Repeater

The Clipper Wind Repeater has the user selectable pointer style and selectable wind speed scale of the master unit.

Technical Specifications

- Consumption, 10mA + (25mA for display illumination max)
- 7 levels of display backlighting
- Complete with 10 metre cable

The Clipper Compass is a fully electronic compass with remote fluxgate sensor. The large clear display has 7 levels of illumination and gives true or magnetic heading.

Clipper Compass

ACTUAL SIZE

Clipper Compass Repeater

Has all the features of the master unit including the steering function and an independent off course alarm. Complete with 10 metre cable.

The sensor which is gimballed for plus/minus 45 degrees of pitch and roll, is mounted in a position where stray magnetic fields are at a minimum. An electronic auto calibration then cancels out small errors.

Steer to course function

When the steering function is selected a series of chevrons accumulate showing the magnitude and direction of the steering error. To stay on course simply turn the wheel in the direction of the chevrons until they are extinguished.

The steering sensitivity can be preset by the user.

An off course alarm provides a safety feature when not at the helm. If the heading deviates by more than a preset amount then the alarm will sound.

Technical Specifications

- Fluxgate accuracy +/- 1 degree
- Adjustable Damping
- 1 degree display resolution
- Display case size 110 x 110mm
- Depth behind panel 30mm
- Fluxgate 72mm x 68mm x 40mm
- sensor supplied with 10 metres of cable
- NMEA 0183 output HDG

Combined Speed/Distance Log and Echo Sounder in standard 110mm square size. Suitable for cockpit mounting.

Clipper Duet System

YACHTING
BEST BUDGET BUY

AWARDED A BLUE RIBBON AT THE MARINE EQUIPMENT TRADE SHOW

ACTUAL SIZE

Technical Specifications

- Depth Sounder in feet and metres.
- Shallow Alarm and Keel Offset
- Speed in MPH , Knots and Km/H
- Trip and Total Distance in Miles, Nautical Miles and Kilometres
- Speed Limit Alarm
- Consumption 20mA+ 25mA for display backlight
- Complete with well proven Transducers

The Clipper GPS Repeater has quickly established itself as the market leader in cockpit GPS repeaters. Typical of the Clipper range it boasts large clear digits and simple operation. Installation could not be simpler with just two wing nuts to fasten the unit into the panel and two wires to connect to the GPS.

Clipper GPS Repeater

AWARDED A BLUE RIBBON AT THE MARINE EQUIPMENT TRADE SHOW

ACTUAL SIZE

Technical Specifications

- Standard 110mm case
- Super large high contrast LCD
- Four instantly accessible display screens
- Standard NMEA 0183 interface suits most GPS receivers
- Complete with weather cover and 10 metres of cable
- Consumption 8mA+ 25mA for display backlight

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Technical Specifications

- 40mm high digits
- Speed (Knots/m.p.h.)
- Trend indicator shows acceleration / deceleration
- Selectable speed averaging
- Tactile keypad
- Complete with weather cover and paddlewheel unit
- Trip and Total Distance (N.Miles / Miles)
- NMEA output 0183 VHW & VLW

Clipper Speed & Distance System

ACTUAL SIZE

Clipper Log Repeater

The Clipper Log Repeater has a speed alarm function as well as repeating all data from the master unit

Technical Specifications

- 7 level display backlighting
- 5 metre single cable (extension cables available)
- Consumption 10mA + 25mA for backlight (max)

Technical Specifications

- 40mm high digits
- Depth below transducer / below keel / below surface
- Deep and shallow alarms (audible and visual)
- User selectable feet or metres
- Intelligent gain control + manual override
- Selectable display rate and depth averaging rate
- Depth trend indicator
- No echo indicator
- High transmit power
- All settings stored in non volatile memory
- Tactile keypad
- Complete with weather cover and transducer
- Consumption 25mA + 25mA for display backlight

Clipper Depth System

ACTUAL SIZE

Clipper Depth Repeater

The Clipper Depth Repeater has its own independent alarm function as well as repeating all data from the master unit.

Technical Specifications

- 7 level display backlighting
- Complete with 5 metre cable (extension cables available)
- Consumption 10mA + 25mA for display backlight

The Log without a paddlewheel and no moving parts
Clipper EASYLOG

ACTUAL SIZE

The Clipper EASYLOG shows speed, trip and total distance on a high visibility liquid crystal display. It utilises the RMC sentence from any GPS or plotter with an NMEA 0183 output. Alternatively the EASYLOG can repeat, using sentences VHW and VLW from an existing NMEA log.

Technical Specifications

- 40mm high characters
- Industry standard 110mm square case
- Speed in Knots with 0.1 knot resolution
- Trip in N.Miles with 0.1 N.Mile resolution
- Total log up to 9999 N.Miles
- 20 levels of backlighting
- Tactile keypad
- Speed trend indicator
- Current consumption 1.5mA at 12V (10mA with backlight)
- Opto isolated balanced NMEA input

The BM-1 compact is designed to monitor performance of 12 volt lead acid battery systems with capacities of up to 600 Amp hours. It is supplied complete with a precision 100 AMP shunt and a prefabricated cable assembly to enable simple DIY installation.

BM-1 Compact

ACTUAL SIZE - Also available in white

The unit continuously monitors voltage, current (charge or discharge), number of amp/hours (charge or discharge), the battery's state of charge and the time to charge or discharge. This information leads to more efficient use of the battery, which can enhance battery life and reduce the risk of failure.

Cables supplied

100 AMP shunt link to M8 Ring terminal.

5 Metre from display unit to battery - fused and fitted with ring terminals for shunt, fuse holder and M8 ring terminal to battery.

Specifications

- Compact size 125 x 62 x 23mm with high contrast LCD
- Supply current 1.5 milliamps
- Battery capacities 5 - 600 AMP hour
- Load current 100 AMPS Maximum
- Supplied with precision shunt and prefabricated cables for simple DIY installation.
- 24V version available

NASA MARINE INSTRUMENTS

The Nasa MOBi is a state of the art, fail-safe transponder man overboard system. It consists of a base unit and up to eight active transponders for crew or valuable equipment.

Man OverBoard Indicator (MOBi)

In operation the base station sequentially interrogates each transponder which then broadcasts its presence. In the event of a crew member falling overboard the drop in signal level is detected by the base unit which sounds a high intensity audible alarm.

To aid identification of the missing crew member the base station continually displays the names of all the crew currently logged on, the signal levels of their transponder fob and their current status.

Three AAA cells power each transponder for several weeks of continuous use.

Should the base station be turned off the transponders will go to sleep with a life of several years.

So if you are sailing with Tom, Dick and Harry don't forget to take MOBi with you !

Technical Specifications

- Failsafe transponder technology
- Pin code identified
- High contrast display with white backlight
- Current consumption 50mA at 12V + 50mA for backlight
- Complete with 3 MOBi fobs and batteries
- Waterproof FOB uses standard AAA type batteries
- Compact display size: 150 x 112 x 42mm
- Fob weight:100 grams
- Fob dimensions 77 x 47 x 38mm max with belt clip

Awarded Best MOB warning system in test from German yachting magazine Segeln

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The EX-1 continually displays the exhaust gas temperature in wet exhaust systems giving advanced warning of potential problems.
An alarm warns of excessive temperatures which could cause exhaust system damage, fires or leaks of toxic gases. It is supplied with a precision temperature sensor and cable to enable simple DIY installation.

EX-1 Compact

ACTUAL SIZE

The EX-1 measures the exhaust gas temperature directly and displays it in degrees centigrade or Fahrenheit. Once the normal working temperature has been established a maximum temperature, a few degrees higher, can be programmed into the EX-1 which will then sound an alarm if that temperature is exceeded.Even a small rise in temperature can indicate a potential problem such as a minor blockage, leak or failing pump which can be corrected before a complete failure occurs.

Technical Specifications

- Compact size 125 x 62 x 23mm with high contrast LCD
- Supply current less than 1.5mA
- Supply Voltage 8 to 15 volts DC.
- Supplied with sensor and 5 metre cable
- Temperature range -35 to +170 degrees Centigrade.
- Threshold range -35 to +170 degrees Centigrade.(-31 to +338 degrees Fahrenheit.)

Sensor and 5 metre cable

The NASA Marine 12 Volt Easylight luminaire contains 48 high efficiency LEDs in a slender surface mounting package.

EASY LIGHT LED Luminaire

The cool white version (CW) is recommended where maximum illumination is required and the warm white (WW) where a more natural light is preferred. The unit is designed for surface mounting directly on a ceiling or wall using the screws provided. It is not waterproof and is intended for use in a dry cabin only.

Technical Specifications

Supply current	320 mA
Supply voltage	11 to 15 Volts
Number of LEDs	48
LED beam angle	120 Degrees
Dimensions	128.5 x 66.5 x 16.5 mm
Polarity protected	Yes
Transient protected	Yes
Colour temp. (WW)	2800-3300 Kelvin
Colour temp. (CW)	5300-6700 Kelvin
Body material	ABS
Clear material	Polycarbonate
Mounting hole pitch	109mm
Weight	75 grams

ACTUAL SIZE

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Just 3.5mm thin our weather proof panels are tough enough to withstand being stepped on when wearing soft soled shoes

Semi Flexible SOLAR PANELS

A solar panel can provide a near maintenance free solution to keeping batteries charged when unattended. An occasional wipe with a damp cloth is all that is necessary to ensure the panel continues to trickle energy into the battery. Keeping the battery topped up will improve its reliability and can extend its useful working life. Whilst solar panels give their maximum output in direct sunlight, even an overcast day can provide a useful level of charge.

The 12 volt, semi flexible solar panels are robustly constructed on a fibre glass substrate and are protected by a scratch proof transparent Tedlar polymer. Only 3.5mm thick and lightweight, they have no metal outer components to make contact with the surface to which they are fitted. The efficient and stable polycrystalline cells are encapsulated between two tough outer layers so the whole panel is weatherproof and carries a limited one year warranty.

The panels can be gently flexed (in one dimension.) to follow a smooth curve, such as a coach roof, by up to 2.5cm per 100cm of panel length. Four, grommet finished, holes are provided for screw fixing. Alternatively panels can be glued into position using mastic. The panels do not

contain glass and, when correctly mounted, can be stepped upon when wearing soft soled shoes. A sealed junction box is fitted with 2.5m of output cable, a connector and fuse protected crocodile clips. Electrical connection is simple though the use of a solar regulator is recommended to prevent overcharge if the system is to be left unattended for long periods or the solar panel to battery ratio exceeds the minimum of 10W to 100Ah. An internal blocking diode prevents reverse current drain at night. The panel is protected with an inline 3 Amp fuse.

The 10 watt panel measures 265mm x 360m

The 20 watt panel measures 350mm x 495mm

NASA MARINE INSTRUMENTS

Easy to read. This new navtex receiver features big, bold characters and intuitive message formatting.

Easy to program. Simple menus let you select which stations and which message categories you want to receive.

Easy on your battery. Its low power consumption and power saver mode on the backlight ensure minimum current drain.

Easy channel switching. Programmable automatic switching between the 518Khz and 490Khz channels. No more getting up early to switch channels.

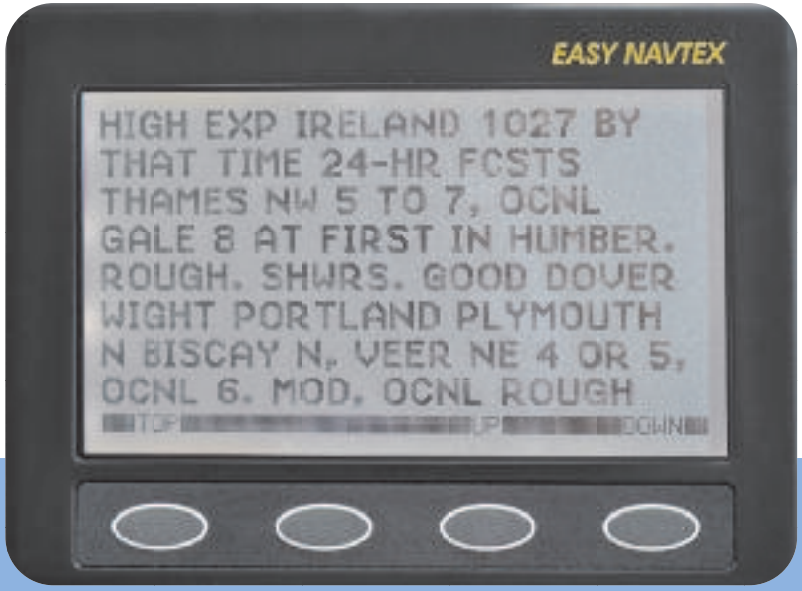
Easy signal analysis. The built in spectrum analyser shows the signal in real time whilst you are receiving messages.

Easy Navtex is designed for panel mounting and is supplied with antenna, power cable and dust cover.

Easy Navtex

Technical Data

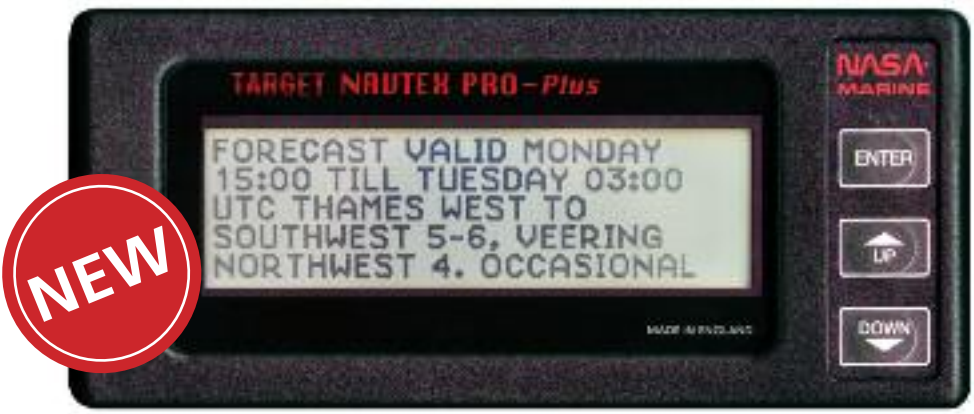
- 518 & 490 kHz operation with programmable channel switching
- Compact panel mount display (stirrup mount bracket available)
- Large letters for easy viewing
- Built in real time spectrum analyser
- Very high contrast display with white backlight
- Power save auto timer on backlight
- Signal quality indicator and message error counter
- Non volatile program memory
- Display size: L-150mm, H-112mm, D-42mm
- Supply voltage nominal 12V
- Consumption 50mA @ 12V (100mA with backlight)
- Active micro antenna: H-195mm & 7m cable
- Optional rail mount bracket


EASY NAVTEX
HIGH EXP IRELAND 1027 BY
THAT TIME 24-HR FCSTS
THAMES NW 5 TO 7, OCNL
GALE 8 AT FIRST IN HUMBER.
ROUGH. SHWRS. GOOD DOVER
WIGHT PORTLAND PLYMOUTH
N BISCAY N. VEER NE 4 OR 5,
OCNL 6. MOD. OCNL ROUGH

The Target Navtex Pro is packed with features yet is still remarkably easy to install and use, it features big bold characters for easy message viewing.

Antenna supplied with Clipper and Target Navtex

Target Navtex Pro-Plus



Navtex has come of age, a free worldwide information service in English. A Navtex receiver is fast becoming a most essential piece of equipment and the Target Navtex Pro is state of the art. This excellent piece of equipment comes complete with its own active aerial and is designed to be left on continuously - consuming a miserly 40mA. Can you afford to be without one?

The messages are displayed on a high contrast backlit liquid crystal display with a clear line space between messages to aid location - this is necessary as the unit has a very large memory.

You can be sure you always have up to the minute data as the memory will overwrite the oldest messages if it becomes full. However you can at any time erase the data memory if you wish. It is like a continuous stream of paper - without the mess or expense! A unique feature of the receiver is the 'Data Streamer'. This is a very useful function that enables the user to see live messages scrolling along the bottom line of the display, whether they are programmed in or not.

Technical Specifications

- 518 & 490 kHz operation
- Receiver supplied with cradle mounting bracket
- Memory capacity for average of 400 messages
- Automatic reset from power up
- Single line and message scrolling
- Non volatile program memory
- Program status can be viewed and changed at any time
- All messages displayed via data streamer whether programmed or not
- Display backlight with auto power save timer
- Easy to read text on high contrast backlit LCD
- AERIAL - Active 195mm x 40mm stub type with 7 metre cable. (mounting bracket and 7 metre extension cable available)
- Supply voltage 12-15v DC
- Current consumption 40mA + 100mA for switchable backlight
- Dimensions - Width 220mm, Height 98mm, Depth 48mm

Liquified petroleum gas (LPG) is an invaluable source of energy on many sailing vessels. It should, however, be used with great care. In its gaseous form it is heavier than air and will always collect at the lowest level in a vessel. Any leak of gas, any spillage of liquid could sink to the bilge and, unable to escape, build up to explosive proportions.

Gas Monitor

The Nasa gas detector system warns if the level of LPG rises above 10% of the lowest explosive limit (LEL) giving adequate warning of the need to ventilate the area before a dangerous situation occurs. The system consists of a cabin mounted monitor and a remote sensor. The monitor gives visual and audible warning if gas levels at the sensor rise above 10% LEL and will warn of fault conditions such as damaged cables etc. There is also an auxiliary output to drive external devices.

The splash proof sensor is supplied with a 5 metre cable and has a test button to check the system right through to the gas sense element. The sense element is user replaceable in the event of contamination.

Technical Specifications

- Supply voltage 9 to 15 volts
- Low current consumption (typically 30mA)
- Fail safe system warns user of system faults
- Continuous performance monitor
- Spare low cost plug in catalytic sensor - available
- External output to drive ancillary equipment
- Dimensions - W 134mm, H 70mm, D 28mm
- LEDs show system status continuously
- Two tone alarm activates when gas level reaches 10% of lower explosive limit

www.nasamarine.com • email: info@nasamarine.com

IMPORTANT
Supernova navigation lights are intended for use on vessels up to 12 metres in length. They comply with CE generic EMC standards and are waterproof to IP65 and IP67. There is no specific EU standard for LED navigation lights. Supernova lights do not have any national approvals.

Supernova
Combi Tricolour Anchor

Supernova lights use high efficiency LEDs ensuring long life and low power consumption. A tough polycarbonate shell protects Supernova from the elements while a Gore-Tex membrane vent ensures equalization of pressure on the seals.

Supernova Combi

A simple two wire connection powers the Combi. Connecting the red wire to positive and the black wire to negative will illuminate the tricolour light. Reversing the connections will illuminate the anchor light. A toggle switch is supplied with the Combi light to facilitate the supply reversal.

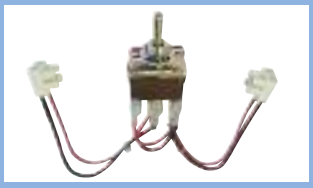
Supernova Tricolour

Technical Specifications

- Supply voltage - 10 to 20 volts (For full brightness)
- Supply current - 200 mA @ 12 volts (Typically 90% less than equivalent incandescent lamps)
- Night time visibility - 2 nautical miles minimum (25 degrees above and below the centerline)
- Waterproofness - IP65 (Water jets), IP67 (Submersion)
- Dimensions - Tricolour/Anchor 91 mm diameter x 113 mm Height (including mounting)
- Dimensions - Combi 91 mm diameter x 133 mm Height (including mounting)

Configuration

Anchor light version - 360 degrees white
tri-colour version - 112.5 degrees red, 112.5 degrees green,135 degrees white



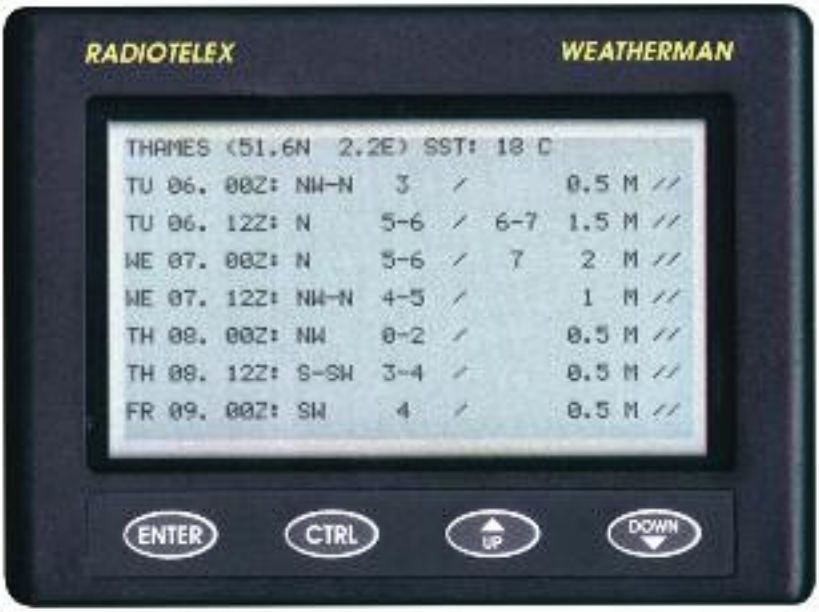
Toggle switch

Supernova Anchor

NASA MARINE INSTRUMENTS

For many years commercial vessels have received weather forecasts via radioteletype (RTTY) from the German National Weather Agency (DWD). Whilst a few intrepid yachtsmen have tuned into this excellent service, with a general purpose HF receiver connected to a personal computer, results have often been disappointing.

Weatherman


RADIOTELEX
WEATHERMAN
THAMES (51.6N 2.2E) SST: 18 C
TU 06. 00Z: NW-N 3 / 0.5 M //
TU 06. 12Z: N 5-6 / 6-7 1.5 M //
WE 07. 00Z: N 5-6 / 7 2 M //
WE 07. 12Z: NW-N 4-5 / 1 M //
TH 08. 00Z: NW 0-2 / 0.5 M //
TH 08. 12Z: S-SW 3-4 / 0.5 M //
FR 09. 00Z: SW 4 / 0.5 M //
ENTER
CTRL
UP
DOWN

Weatherman combines a synthesised HF receiver, a powerful computer and a high contrast display to form a complete, reliable, stand alone RTTY receiver. Unlike Navtex, which is an international service for navigational and meteorological warnings, Weatherman is dedicated to receiving weather forecasts.

DWD operates on a 24 hour continuous schedule and broadcasts continually on several frequencies simultaneously. This helps to cope with the radio propagation and reception conditions which vary with time of day and the distance from the transmitter.

The DWD service is free to yachtsmen but must not be used for commercial purposes.

The daily schedule includes times of day, frequencies and areas of coverage.

Technical Specifications

- 16 lines x 40 characters per screen
- Very high contrast display with white backlight
- Supply voltage nominal 12v
- Consumption 50mA @ 12v (100mA with backlight)
- Power save auto timer on backlight
- Spectrum screen for simple signal analysis
- Non volatile program and message memory

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Weatherman can receive the following frequencies:

DDK9@ 10.1008 MHZ
DDH7 @ 7.646 MHZ
DKK2@ 4.583 MHZ
Program 1 in English Language
DDH9 @ 11.039 MHZ
Program 2 in German Language

Optional cradle mount bracket

Mediterranean
Alboran
Palos
Algier
Golfe de Lion
Balearic Is
Ligurian Sea
W of Corsica/Sardinia
Tyrrhenian Sea
S of Sardinia

East Mediterranean
Golfe de Lion
Balearic Is
Ligurian Sea
West of Corsica/Sardinia
Tyrrenhian
Adriatic Sea N
Adriatic Sea S
Ionian
Aegean Sea N
Aegean Sea S
Rhodes and Cyprus
Black Sea W
Black Sea E
East of Tunis
Port-Said

North Atlantic
AREA 51
Penti-Farvel 1
Penti-Farvel 2
Penti-Farvel 3
Cape Farvel
SE Greenland
SW Greenland
S of Ireland
Eng Chann East
Lyme Bay
Eng Channel West
Bay of Biscay
Finisterre
W of Portugal
W of Gibraltar
Gibraltar
Canaries S

Baltic Sea
Skagerak
Belts and Sound
W Baltic
S Baltic
SE Baltic
Central Baltic
Northern Baltic
Gulf of Riga
Gulf of Finland
Sea of Alland
Sea of Bothnia
Quark
Bay of Bothnia

Norwegian and Baltic Seas
North Cape
Lofoten
Haltenbank
Svinoy
Faroes
Pentland Firth
Hebrides
Shetlands
Bay of Bothnia
Quark
Sea of Bothnia
Sea of Alland
Gulf of Finland

North Sea
German Bight
Humber
Thames
Dogger
Forties
Fisher
Viking
Utsira S
Utsira N
Skagerak
Ijslmeer
Eng Ch E
Eng Ch W

The user can program Weatherman to record information only from areas of interest. The memory is able to store several thousand lines of text. Details of further Atlantic coverage together with the latest schedule are available from http://www.dwd.de.

Complete with
Active Micro Antenna:
H-175mm x 40mm
7M cable

- Compact size L-150mm, H-112mm, D-42mm
- Complete with Active Micro antenna: H-175mm x 40mm 7M cable
- The availability of the DWD signals is dependent on radio propagation and local conditions

NASA MARINE INSTRUMENTS

The Target range has achieved great success since its launch in 1991 and has established itself as the UK market leader in low cost and reliable cockpit instruments. Much thought went into designing these instruments and the effort has paid dividends. There are more than 50,000 Target instruments in use worldwide, they have proved themselves as extremely durable products that belie their low cost.

Target Range

Target Speed & Distance Log

Following the NASA design philosophy, the Target Log is simple and reliable showing speed in knots, trip distance to 999 nautical miles and total distance run up to 999 nautical miles.

Technical Specifications

- Speed range 0-30 knots in 0.1 knot increments
- Trip distance (re-settable) to 999nm
- Total distance (non-volatile memory) to 999nm
- Large display back-lit for night use
- Proven paddle wheel sensor
- Consumption, 10mA, + 10mA display illumination
- Compact size only 132 x 98 x 30mm
- Simple operation, 3 keys, 3 functions
- Easily calibrated

Target Depth System

The biggest selling marine instrument world-wide is still the depth sounder. In the Target sounder you will find all the necessary features of much higher priced units including keel offset, shallow and deep water alarms, and a depth range of 0.8 - 100 metres.

Technical Specifications

- Compact size only 132 x 98 x 30mm
- Includes standard NASA transducer
- Depth range of 0.8 to 100m
- Deep and shallow alarms
- Keel offset
- Programmable 'Gain' profile
- Large display, back-lit for night use
- Simple operation
- Consumption, 12mA, + 10mA display illumination

Supplied with paddlewheel sensor and 7 metres of cable

Supplied with transducer and 7 metres of cable

All instruments in the Target Range come complete with sensors or transducers as appropriate and all necessary fittings. They are designed to run on 12v supply, but due to the very low power consumption there is no reason why they cannot run off dry batteries. They provides accurate readings for owners of sailing craft and powerboats alike.

Target Wind Speed & Direction

Designed for long term maintenance-free performance, the NASA Wind Speed and Direction instrument is robust in manufacture and simple in operation. Initial set-up aligns the boats head with the wind indicator, so the masthead unit can be mounted in any convenient location and is not bound to fore-aft mounting.

Technical Specifications

- Full 360 degree display of apparent wind
- No dead quadrant
- Digital wind speed in knots
- keypad adjustment of mast-head alignment
- Large display, back-lit for night use
- Supply voltage nominal 12v DC
- Compact cockpit display unit 132 x 98 x 30mm
- Low current consumption

Target Compass System

The compact fluxgate sensor is fully gimballed and supplied with 10m of cable. The unit is sealed to CFR-46 standard.

Technical Specifications

- Large display, back-lit for night use
- Simple operation
- Supply voltage Nominal 12v DC
- Consumption, 20mA, +10mA display illumination
- Fluxgate accuracy +/- 1 degree
- Compact display unit size 132 x 98 x 30mm
- Fully gimballed sensor
- 0-360 degrees with 1 degree resolution
- Nine levels of adjustable damping

Supplied with Masthead Unit complete with 20 metres cable

Supplied with sealed and fully gimballed sensor with 10 metres of cable

NASA MARINE INSTRUMENTS

The Target HF3 is a masterpiece of R. F. engineering covering the entire spectrum between 30Khz to 30Mhz. For those new to single side band reception the unit comes complete with everything needed to 'get on the air'.

Target HF3P & HF3W Receiver

Controls on the front of the receiver change reception mode, from a narrow filter for SSB reception to a wide filter which enables high quality audio signals to be heard from broadcast stations around the world. They also control ten memory channels to store your favourite frequencies.

The large, clear liquid crystal display shows the precise frequency tuned to and there is no need for constant 'correcting' with the tuning knob so often associated with SSB signals as the receiver is fully synthesised.

Optional HF active antenna

- Direct connection to HF3 & HF3W receivers
- Frequency range 30Khz/30Mhz
- Power consumption 20mA @ 12V
- Overall height 420mm
- Complete with 7 metres of cable

Optional panel mount kit supplied with ext speaker

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Minimum system requirements:
Windows 98 to 7, Pentium 166 compatible or better 24 mb RAM and sound card

Navtex

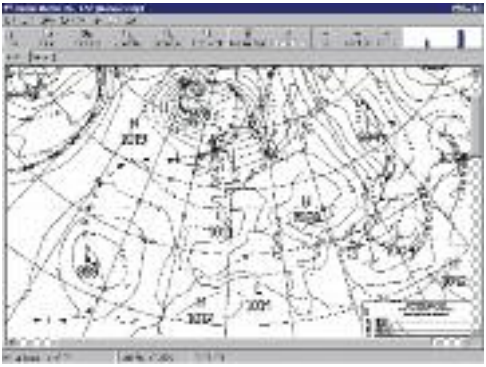
TARGET HF3/P

The Target HF3/P has a fixed level audio output to connect to third party weatherfax software. The receiver is supplied complete with a basic wire antenna, 12 volt power cable and instruction book.

TARGET HF3/W

The HF3/W is complete with CD software and interface cable for connection to a PC sound card. The software enables reception of weatherfax pictures, Radiotelex weather forecasts and Navtex.

Simply install the software, plug in the supplied cable to the receiver output and PC sound card to receive weatherfax pictures and forecasts from around the world.



Weatherfax

Technical Specifications

- Signal level indicator
- Fully synthesised
- Frequency range - 30Khz - 30Mhz
- Modes - USB/AM/LSB
- Single side band - 3.8Khz wide
- 10 memory channels
- AM - 6Khz wide
- Audio output - 2 watts
- Power supply - 12 volts DC
- Power consumption - 300mA
- Dimensions - Width 180mm, Height 58mm, Depth 170mm

Radiotelex

Contemporary styled instruments for cabin or cockpit mounting

Cruiser Range

Cruiser Speed & Distance Log

Technical Specifications

- Very large display
- Speed range 1-30 knots in 0.1 knot increments
- Blue backlighting
- Trip and Total logs
- Keypad calibration adjustment
- Complete with paddlewheel sensor with 7 metres of cable
- Simple Operation
- Low current consumption - 8mA @ 12V + 20mA for backlight
- Dimensions - 132mm x 98mm x 29mm

Cruiser Depth System

Technical Specifications

- Very large display
- Depth range 0.8 to 100 metres
- Shallow and deep alarms
- Blue backlighting
- Keel offset
- Simple Operation
- Compete with transducer and 7 metres of cable
- Low current consumption - 10mA @ 12V + 20mA for backlight
- Dimensions - 132mm x 98mm x 29mm

Supplied with paddlewheel sensor and 7 metres of cable

Supplied with transducer and 7 metres of cable

Cruiser Wind Speed & Direction

Technical Specifications

- Large High resolution 360 degree display of apparent Wind direction
- User selectable pointer style
- User selectable windspeed in knots, M.P.H or K/M/H
- Blue backlighting
- Simple Operation
- Keypad adjustment of masthead alignment
- Complete with Masthead unit with 20 metres cable
- Low current consumption - 35mA @ 12V + 20mA for backlight
- Dimensions - 132mm x 98mm x 29mm

Cruiser Compass System

Technical Specifications

- Very large display
- Digital bearing and programmable analogue steer to course indicator
- Automatic compensation routine
- Blue backlighting
- Simple Operation
- Sealed and fully gimballed sensor with 10 metres of cable
- Low current consumption - 20mA @ 12V + 20mA for backlight
- Dimensions - 132mm x 98mm x 29mm

Supplied with Masthead Unit complete with 20 metres cable

Supplied with sealed and fully gimballed sensor with 10 metres of cable

NASA MARINE INSTRUMENTS

The NASA Stingray Echo Sounders come in a slimline case with an easy to read extra bright LED display on a 4 inch dial. They both have a dual audible alarm for shallow and deep water which can be set to give two ranges either 1-25 metres or 1-100 metres, and are simplicity itself to operate. They are complete with transducer and stirrup mounting bracket and only require connection to the ships 12v power supply

Stingray Echo Sounder

How They Work

Very simply, they make a noise and measure the echo. Knowing that sound travels at 144 metres a second through water allows us to calculate the depth by measuring the interval between the sound being made and the echo being heard. The Stingray Echo Sounders have a transducer with a high quality Lead Zirconate Titanate Piezodisc crystal which creates ultrasonic 'sound' pulses at a frequency of 150kHz (imperceptible to the human ear). These pulses pass through the water and bounce back off the bottom. The returning echo pulse is then sensed by the transducer crystal. On these rotary flashing LED type sounders, a pulse is generated as the LED flashes at the 12 'o' clock position.

The rotor arm is calibrated to run at a speed whereby when it flashes on receiving the returned pulse this flash will be in the correct position on the dial to indicate the correct depth.

Technical Specifications

- Supply Voltage - Nominal 12v DC
- Power Consumption - Nominal 120mA
- Power Output - 100w + Pulse
- Oscillation rate:
  Range A, 0-25 37.5 pulses for sec.
- Range B, 0-100 7.5 pulses for sec.
- Transducer - lead Zirconate Titanate Piezodisc with 7 metres of cable
- Operating Frequency - Nominal 150kHz
- Weight (incl. Transducer) - 1kg

Stingray Standard

This is the basic dual alarm, dual range unit with LED display only.

Stingray Twin

Dual alarm, dual range sounder with digital LCD dept readout in addition to the flashing LED display.

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Accessories & Spares

EX1 temperature sensor complete with cable
£28-00

Shunt 50 millivolt 200 Amp shunt for BM-2
£19-00

RS232-USB adaptor
£19-95

BM1 5 metre cable
£11-00

Shunt 50 millivolt 100 Amp shunt for BM-1
£13-00

Shunt Cable
£4-00

NMEA Compass Sensor
£89-00

Clipper mounting pod
For mounting 2 Clipper displays
£41-00

PC AIS Radar software £10-00

Cradle mount bracket
£20-00

Waterproof VHF Extension Speaker
£13-00

HF3 panel mount
Kit incl ext speaker £19-50

Gas sense element
£16-00

Power Cable
£6-00

Instrument O rings
£2-50

Masthead mounting kit
£6-00

5 metre wind extension cable £15-00

Mast Head Unit
£120-00

Wind vane kit
£14-00

20 metre wind extension cable £27-00

NMEA Masthead Unit
£125-00

Wind Cup Kit
£14-00

Complete Paddle Wheel Unit (with 7 metre cable)
£35-00

Speed Log Paddle wheel unit £25-00

Log skin fitting
£9-00

Log blanking cap
£6-50

Paddlewheel + spindle
£6-50

Dust cover for Clipper Navtex, AIS Radar etc.
£5-00

Weather covers
£4-50

7 metre coaxial extension cable £13-00

Through hull transducer mounting kit £21-00

Depth Transducer (with 7 metre cable)
£28-00

In hull transducer mounting kit £17-00

HF active antenna
£42-00

518Khz navtex antenna
£31-00

Series 2 navtex antenna
£31-00

Weatherman antenna
£31-00

Antenna rail mount bracket £20-00

Secure online order facility for all accessories & spare parts at www.nasamarine.com

NASA MARINE INSTRUMENTS 2014

PRICES	Price	VAT	RRP
Yacht Repeater	£324.17	£64.83	£389.00
AIS SART Radar	£224-17	£44-83	£269-00
AIS Engine 3	£110-83	£22-17	£133-00
Easy Navtex	£237.50	£47.50	£285.00
BM-1 Compact	£87-08	£17-42	£104-50
Clipper Depth	£129-17	£25-83	£155-00
Clipper Log	£129-17	£25-83	£155-00
Clipper Wind	£191-67	£38-33	£230-00
Clipper Compass	£170-83	£34-17	£205-00
Clipper Duet	£173-33	£34-67	£208-00
Clipper BM-1	£87-50	£17-50	£105-00
Clipper BM-2	£107.50	21.50	£129.00
Clipper Easylog	£68-33	£13-67	£82-00
Clipper GPS repeater	£100-00	£20-00	£120-00
Clipper Compass repeater	£91.67	£18.33	£110.00
Clipper Repeaters (log, depth, wind)	£68-33	£13-67	£82-00
Close Haul Meter	£68-33	£13-67	£82-00
Clipper Weatherman	£249-17	£49-83	£299-00
PC Navtex Pro USB	£112-50	£22-50	£135-00
Target Navtex Pro Plus	£205-83	£41-17	£247-00
Meteoman	£120-83	£24-17	£145-00
Meteoman & NMEA MHU	£207-50	£41-50	£249-00
MOBi cw 3 x fobs	£237-50	£47-50	£285-00

PRICES	Price	VAT	RRP
MOBi fob x 1	£40-83	£8-17	£49-00
MOBi fob x 5 pack	£166-67	£33-33	£200-00
EX1	£86-67	£17-33	£104-00
Target 2 Depth	£87-50	£17-50	£105-00
Target 2 Log	£87-50	£17-50	£105-00
Target Wind	£148-33	£29-67	£178-00
Target Compass	£133-33	£26-67	£160-00
Target HF3/P	£170-83	£34-17	£205-00
Target HF3/W	£195-83	£39-17	£235-00
Stingray Standard E/S	£82-50	£16-50	£99-00
Stingray Twin E/S	£100-00	£20-00	£120-00
Cruiser Depth	£97-50	£19-50	£117-00
Cruiser Log	£97-50	£19-50	£117-00
Cruiser Wind	£159-17	£31-83	£191-00
Cruiser Compass	£150-83	£30-17	£181-00
NMEA Compass Sensor	£76-67	£15-33	£92-00
GAS Monitor	£65-83	£13-17	£79-00
Supernova Anchor/Tricolour	£45-83	£9-17	£55-00
Supernova Combi	£107-50	£21-50	£129-00
Easy Light Warm White	£20.83	£4.17	£25.00
Easy Light Cool White	£20.83	£4.17	£25.00
Solar Panel 20w	£99.17	£19.83	£119.00
Solar Panel 10w	£54.17	£10.83	£65.00

NASA Marine Ltd, Boulton Road, Stevenage, Hertfordshire SG1 4QG
Spare Parts Order Line: 01438 221023

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